

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-3, 5-7 and 10 are now present in this application. Claims 1 and 7 are independent. By this Amendment, claim 1 is amended. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 1 stands rejected under 35 U.S.C. § 112, second paragraph. This rejection is respectfully traversed.

The Examiner has set forth one instance wherein the claim language lacks antecedent basis.

In order to overcome this rejection, Applicant has amended the subject matter of claim 1 to correct the deficiency specifically pointed out by the Examiner, without narrowing the scope of the claim. Applicant respectfully submits that claim 1, as amended, particularly points out and distinctly claims the subject matter which Applicant regards as the invention.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection Under 35 U.S.C. § 103

Claims 1-3, 5-7 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,247,339 to Kenjo et al. ("Kenjo") in view of U.S. Patent 4,741,182 to Didier and

further in view of U.S. Patent 6,006,445 to Large and U.S. Patent Application Publication 2003/0009832 to Yang et al. ("Yang"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action and is not being repeated here.

Because the rejection is based on 35 U.S.C. § 103, what is in issue in such a rejection is "the invention as a whole," not just a few features of the claimed invention. Under 35 U.S.C. § 103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under § 103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. *See In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. *See Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. § 103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art

as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal Inc. v. F-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil, Inc. v Delta Resins & Refractories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hospital Systems, Inc. v Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." *C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See *In re Dembiczak*, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Furthermore, during patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent. Only when a *prima facie* case is made, the burden shifts to the Applicant to come forward to rebut such a case.

With respect to claims 1-3, 5 and 7, each and every one of the applied references used in this rejection fails to disclose that its controlling part detects if one of a preset rotation speed is the same as a maximum value of a detected rotation speed and fails to determine a drying time period relevant to the preset rotation speed which is the same as a maximum value of the detected rotation speed, as the drying cycle time period.

Kenjo certainly does not contain this disclosure inasmuch as its load determination method is limited to the extent that it “involves, e.g., transition of rotating speed of motor 5 during the given time based on the signals from the detector 17 . . .” (col. 4, lines 35-39). Nor does the Office Action explain where these positively claimed features are found in Didier.

Additionally, Kenjo’s load determination is not used to achieve drying but to increase the cleansing power during a wash cycle.

Didier certainly does not contain this disclosure inasmuch as its process for determining the load of clothes in a rotary drum includes determining the moment of inertia of the mass of

clothes in the drum from data concerning the motor torque or drive torque, the acceleration of the drum, the friction torque and the moment of inertia of the drum (col. 2, lines 12-17). Nowhere does Didier provide preset rotation speeds, or detect if one of a preset rotation speed is the same as a maximum value of a detected rotation speed and fails to determine a drying time period relevant to the preset rotation speed which is the same as a maximum value of the detected rotation speed, as the drying cycle time period. Nor does the Office Action explain where these positively claimed features are found in Didier.

Large certainly does not contain this disclosure inasmuch as it has no process for even determining the load of clothes in a rotary drum. Nowhere does Large provide preset rotation speeds, or detect if one of a preset rotation speed is the same as a maximum value of a detected rotation speed and fails to determine a drying time period relevant to the preset rotation speed which is the same as a maximum value of the detected rotation speed, as the drying cycle time period. Nor does the Office Action explain where these positively claimed features are found in Large. In fact, Large is not applied to disclose these positively recited features.

Yang also does not disclose providing preset rotation speeds, or detecting if one of a preset rotation speed is the same as a maximum value of a detected rotation speed and fails to determine a drying time period relevant to the preset rotation speed which is the same as a maximum value of the detected rotation speed, as the drying cycle time period. Yang actually detects laundry weight by determining whether a first predetermined time elapses after a motor is initiated and reaches a certain speed, controls the motor in a motor torque mode when the first predetermined time elapses, and detects a laundry weight on the basis of the motor speed after a second predetermined time elapses (abstract of Yang). Applicant respectfully submits that these

features of Yang are not detecting if one of a preset rotation speed is the same as a maximum value of a detected rotation speed and fails to determine a drying time period relevant to the preset rotation speed which is the same as a maximum value of the detected rotation speed, as the drying cycle time period, as claimed. Nor does the Office Action explain where these positively claimed features are found in Yang.

In other words, not one of the four applied references discloses a controlling part that detects if one of a preset rotation speed is the same as a maximum value of a detected rotation speed and fails to determine a drying time period relevant to the preset rotation speed which is the same as a maximum value of the detected rotation speed, as the drying cycle time period, as claimed.

While the Office Action discusses the applied references in terms of "load calculation to determine load of laundry," and "a look-up table in memory that compares detected speeds to associated weight loads," and "stored speeds and a look up table in memory," it never explains where the claimed language is found in any of the applied references.

Moreover, the conclusion that "it would be obvious to one of ordinary skill in the art to use other known methods of weight detection using the same measured variables, in this case speed, to calculate laundry load and proceed with process control," never states what these "other known methods" are and fails to provide objective factual evidence that the claimed invention is one of these other known methods. Certainly, the four applied references do not disclose the claimed invention.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the invention recited in claims 1-3, 5-7 and 10.

Additionally, Applicant has attached to this Amendment an English language translation of Applicant's priority Korean Application P2002-073878, filed on November 26, 2002, benefit of which is claimed under 35 U.S.C. § 119, which makes this rejection based on 35 U.S.C. §103(a) improper with respect to Yang.

Applicant hereby states that, at the time of Applicant's claimed invention, U.S. Patent Application Publication 2003/0009832 was commonly assigned to, or was under obligation to be assigned to, LG Electronics Inc, the Assignment being recorded in the USPTO at Reel 012375, Frame 0648.

In view of this statement and the English language translation of Applicant's priority Korean Application, and the provisions of 35 U.S.C. § 103(c), Yang is not prior art to Applicant, and this rejection must be withdrawn.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Application No.: 10/720,056
Art Unit 1746

Docket No.: 0465-1094P
Reply to Office Action dated August 17, 2007

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: January 15, 2008

Respectfully submitted,

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Attachments: English language Translation of Republic of Korea P2002-073878
Statement of Accuracy of English Language Translation